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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,460	08/03/2001	Jack Hong	4366-50	7012

48500 7590 05/12/2005
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EXAMINER

ARTHUR JEANGLAUDE, GERTRUDE

ART UNIT PAPER NUMBER

2144

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/921,460

Applicant(s)

HONG ET AL.

Examiner

Gertrude Arthur-Jeanglaude

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42-56 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8, 9, 11-15, 25-28, 32-34 and 36 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 7, 10, 16-24, 29-31, 35 and 37-41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6,8, 9, 13, 27, 34, 36, are rejected under 35 U.S.C. 103(a) as being unpatentable over Colby et al. (U.S. Patent No. 6,862,624) in view of Gupta et al. (U.S. Patent No. 6,718,387).

As to claims 1, 36 Colby et al. disclose in Fig. 1b. a network switch for switching transaction requests among a plurality of servers (100a-100c), the network switch being positioned between the plurality of servers and at least one client (as shown in Fig. 1c.) comprising a parser and tag generator (110) as shown in Fig. 1b, 1c) to parse transaction requests to locate one or more selected fields; it discloses a router (130) as shown in Fig. 1b. operable to forward at least portions of the transaction requests to respective servers in the plurality of servers and transaction responses of the respective servers to the transaction requests to respective clients; and the tag generator as discussed operable to generate a tag associated with a selected server in the plurality of servers and include a tag in a transaction response received from the selected server. Colby et al. fail to specifically disclose a subsequent transaction request

Art Unit: 2144

includes the tag and the cookie, and based on the tag, the router forwards the subsequent transaction request to the selected server. In an analogous art, Gupta et al. disclose a network having a plurality of servers wherein it discloses a tag and cookie in a request transaction (See col. 10, lines 5-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Colby et al. with that of Gupta et al. by having a transaction request and a cookie generated by the selected server, whereby, when a subsequent transaction request is received from the client corresponding to the tagged transaction request wherein the transaction request includes the tag and the cookie in order to accomplish load balancing in the event of multiple network failures.

As to claims 2, 13, 27, Colby et al. disclose the tag generator (110 as shown in Fig. 1b) as discussed but does not specifically disclose that it is operable to append the tag to the cookie. In an analogous art, Gupta et al. disclose a network having a plurality of servers wherein it discloses a tag and cookie in a request transaction (See col. 10, lines 5-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Colby et al. with that of Gupta et al. by having a transaction request and a cookie generated by the selected server, whereby, when a subsequent transaction request is received from the client corresponding to the tagged transaction request wherein the transaction request includes the tag and the cookie in order to accomplish load balancing in the event of multiple network failures.

As to claim 3, Colby et al. discloses each of the plurality of servers (100a-100c) as shown in Fig. 1b has a unique server identifier and the tag associated with each

server (See col. 6, lines 56-65) is based on the corresponding unique server identifier (See col. 7, whereas the CSD is used to identify the servers).

As to claims 6, 34, Colby et al. disclose all but fails to specifically disclose a decryption processor that decrypts cipher text transaction requests and provides plain text transaction requests to the parser. In an analogous art, Gupta et al. disclose a decryption processor that decrypts cipher text transaction requests and provides plain text transaction requests to the parser (See col. 6, lines 3-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Colby et al. with that of Gupta et al. by having a decryption processor that decrypts cipher text transaction requests and provides plain text transaction requests to the parser in order to allocate connection when redistribution occurs.

As to claim 8, Colby et al. disclose the selected fields include at least a universal resource locator (See col. 6, lines 50-56), but fails to specifically disclose a cookie. In an analogous art, Gupta et al. disclose a cookie and tag (See col. 10, lines 5-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Colby et al. with that of Gupta et al. by having a cookie in the selected fields for the purpose of load balancing.

As to claim 9, Colby et al. disclose the router (130) as shown in Fig. 1b includes a current connection table listing active connections between servers and clients (See col.7, lines 60-67-col. 8, lines 1-17).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 11-12, 14-15, 25-26, 28, 32-33, are rejected under 35 U.S.C. 102(e) as being anticipated by Colby et al. (U.S 6,862,624).

As to claims 11, 25, 32, Colby et al. disclose a method for switching transaction requests, comprising: receiving, from a first source, a transaction response associated with first source, the transaction response corresponding to at least a first transaction request; parsing the transaction response to locate at least a first field; determining a first tag identifying the first source; appending the first tag to the first field in the transaction response; reassembling the transaction response; forwarding the transaction response to a destination identified by the transaction response wherein the first source is a first server in a plurality of servers and the-destination is a client: receiving the transaction response after the forwarding step: storing the first tag in the client's memory and forwarding a second transaction request to an address associated with the first server, the second transaction request including the first tag (See Figs. 1b, 1c ; Fig. 3, Fig.8; Fig.20; col. 10, lines 59-67, abstract).

As to claims 12, 15, 26, Colby et al. disclose the first field is associated with a server-generated tag, wherein the first tag is an address, and wherein the first tag is derived from field information in the at least a first field (See Fig. 20; col. 15, lines 59-67- col. 16, lines 1-27).

As to claims 14, 28 Colby et al. discloses each of the plurality of servers (100a-100c) as shown in Fig. 1b has a unique server identifier and the tag associated with each server (See col. 6, lines 56-65) is based on the corresponding unique server identifier (See col. 7, whereas the CSD is used to identify the servers).

As to claim 33, Colby et al. disclose the network switch (110; Figs. 1b, 1c) is operable to store the first tag and to parse the first transaction request.

Allowable Subject Matter

Claims 4-5, 7, 10, 16-24, 29-31, 35, 37-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to disclose the switch further comprises a cache operable to store a plurality of objects corresponding to transaction requests associated with at least one of the plurality of servers, the objects comprising field information in at least one of the selected fields located by and received from the parser; a digest generator operable to generate a digest based on the field information in at least one selected field of a transaction request, the digest corresponding to a location in the cache where at least one object corresponding to the transaction request is to be stored; and a cache

Art Unit: 2144

processor operable to access the plurality of objects in response to communications received from the router.

Nor does the prior art disclose parsing the second transaction request for at least the first field; determining a digest value based on field information in the at least the first field; and storing selected information corresponding to the second transaction request at an address based on the digest value.

Claims 42-56 are allowed.

The prior art fails to disclose a method for configuring stored information in at least one cache server comprising comparing first and second hot reference counters corresponding to first and second information to determine which of the first and second information is more frequently requested; and storing the more frequently requested of the first and second information in a first location and the less frequently requested of the first and second information in a second location and wherein the first location is more accessible than the second location.

Response to Arguments

Applicant's arguments with respect to claims 1-56 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gertrude Arthur-Jeanglaude whose telephone number is (571) 272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wiley David can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Art Unit: 2144

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GAJ



May 9, 2005



GERTRUDE A. JEANGLAUDE
PRIMARY EXAMINER